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That Complex Earnings Per Share Figure (A Product of the Merger Movement)

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THAT COMPLEX EARNINGS PER SHARE FIGURE
(A Product of the Merger Movement)

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Earnings per share (EPS), one of key financial ratios that corporations report to their shareholders, is disseminated widely in the financial press and is a primary determinant of the market price of shares. Price/earnings ratio, the multiple that equates earnings to market price, is itself largely affected by the rate of growth in earnings per share and future growth prospects. Earnings per share and market price per share, in turn, are among the major factors that determine the ratio of exchange of shares in mergers. This is quite well known to corporate management.

Being versed in the arithmetic of earnings per share

$$\frac{\text{(Net income — preferred dividends)}}{\text{Number of outstanding common shares}}$$

merger minded managers perceived that if securities other than common stock could be used to effect mergers an immediate dilution of EPS, under certain conditions, could be avoided (at least under former reporting rules). As a consequence, in the competitive drive for acquisitions, prices were bid up, not in terms of cash or common stock, but rather in terms of convertible preferreds, convertible debentures, warrants, options and contingent issues of common stock.

What are the characteristics and features of the securities which have helped to propel merger activity? Why have convertible preferreds and warrants become so important? What have been their effects on earnings per share and how have reporting standards been modified to cope with complex corporate capitalizations? Let us consider the securities first.

In late 1968, Winn-Dixie Stores, Inc. offered its shareholders Class B shares[1] in exchange for common stock. The Class B shares do not pay dividends but are convertible into Winn-Dixie common on a steadily rising rate. During 1969 they were exchangeable on a for-share basis. This exchange ratio increased on January 1, 1970, by 0.045 share and will continue to increase annually until 1982, when each Class B share will be the equivalent of 1.54 common shares.

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1 *Peculiar Preferred*, FIN. WORLD, Dec. 25, 1968, at 10.

This constantly rising exchange rate has been designed to persuade stockholders to delay conversion of their shares — thus decreasing apparent dilutive effects. In past years, varying conversion rates were generally on a decreasing rather than increasing basis. The new feature accomplishes an important function for management. It adds to earnings per share because, under former rules, the Class B shares would not be included in the computation of EPS. There are also fewer shares outstanding on which dividends must be paid — thus conserving funds.

Convertible preferred stock (an equity security once out of favor) has returned to style as an acquisition tool. Through the use of convertible preferreds, tax-free mergers have been effected which could not have been accomplished had the consideration been cash or bonds. Convertible preferreds also possess the advantage of being considered sufficiently like common stock to permit pooling-of-interest accounting and at the same time not counting like common stock, under former rules, in computing earnings per share.

One writer asserts that another advantage of a convertible preferred, designed to sell at a premium above its conversion value, is that fewer common shares will ultimately be issued.

> Suppose an acquiring company's stock sells for $50 a share, and the price of the acquisition is $10,000,000. An acquisition using common would require 200,000 shares. Instead, a convertible preferred could be designed to sell at $100 with a conversion ratio of, perhaps, 1.7 — producing a conversion value of $85 — and an appropriate dividend. An issue of 100,000 shares would achieve the required $10,000,000 market value and would eventually convert into only 170,000 shares of common. The issuer has still paid $10,000,000. . . . But only part of the price is in the current conversion value of the preferred. The balance is represented by his commitment to pay cumulative fixed dividends unless and until conversion takes place.[2]

Numerous mergers have been effected, in part, with stock purchase warrants[3] — options to purchase shares prior to expiration at some future date. Significantly, when employed properly, warrants can temporarily increase the earnings per share of the issuing company. The key advantage of warrants as a merger device is its lower dilutive effect when compared to convertible debt or convertible preferred. Furthermore, when a warrant is exercised, the option holder is required to pay a certain sum of cash to obtain the specified number of shares. Corporate funds are thereby in-

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2 Meyer, *Designing a Convertible Preferred Issue,* FIN. EXEC., April 1968, at 42-53.

3 Leasco Data Processing issued 2.8 million warrants as part of its acquisition of Reliance Insurance; Gulf and Western issued over 1.1 million in acquiring Consolidated Cigar and another 4.2 million were offered as part of its tender offer to acquire Allis-Chalmers and Brown Company. Nation General issued 6.5 million warrants in its acquisition of Great American Holding Corporation. *See Warrants — New Takeover Tool,* FIN. WORLD, Dec. 4, 1968, at 11.

creased; whereas the conversion of debt or preferred is generally not accompanied by a cash payment.

To illustrate the extent to which securities which represent potential common shares can increase the total number of common shares outstanding, the authors have selected several companies which appear to have made use of contingent additional shares in their capital structures and merger activities. In Table I, we show for each company the number of

TABLE I
POTENTIAL INCREASE IN COMMON SHARES BASED ON 1968 FISCAL YEAR END

	Common Shares Outstanding	Shares Issuable on Convertibles	Shares Issuable on Warrants and Options	Potential Shares Outstanding	Percentage Increase
			Thousands		
Atlantic Richfield Co.	33,216	6,807	1,184	41,207	24
Certain-Teed Products Corp.	3,839	1,010	80	4,924	28
Gamble-Skogmo Inc.	3,602	1,959	961	6,522	81
Glen Alden Corp.	17,478	13,076	745	31,299	79
Gulf Resources & Chemical Corp.	3,118	1,646	219	4,983	60
Lear Siegler Inc.	5,236	2,445	140	7,821	49
Leasco Data Processing Equipment Inc.	3,095	3,468	3,683	10,246	231
Ling-Temco-Vought Inc.	2,072	3,865	6,084	12,021	480
National Can Corp.	1,791	1,471	286	3,548	98
Northrop Corp.	4,628	1,676	266	6,570	42

common shares outstanding as of their 1968 fiscal year end, the additional shares potentially issuable based on conversions or exercise of warrants, and the potential shares outstanding. The final column depicts the potential percentage increase in common shares outstanding. This potential increase ranges from a high of 480 percent for Ling-Temco-Vought, to a low of 24 percent for Atlantic Richfield Company.

One may certainly question whether in situations like that of Ling-Temco-Vought, or Leasco Data Processing, it would be meaningful to report earnings per share based on actual outstanding common shares, as some would still propose, considering how much of the future prosperity of the company has been "mortgaged." Less dramatic, but equally significant, is National Can Corporation whose 1,791,000 shares can easily explode into 3,548,000 shares, a potential increase of 98 percent.

Clearly, the potential shares of common stock in corporate capitalizations has reached disturbingly high proportions. However, in attempting to assess this condition in terms of the potential dilution of earnings per share, we are confronted with the task of analyzing the specific terms of complex securities to determine the probability of conversion into common stock. A myriad of combinations of terms and characteristics are possible. Competent legal, financial and accounting advice is often required to interpret specific provisions. The variety of features which may be incorporated in a convertible bond issue or a convertible preferred appears in Table II. Each of these features might have to be interpreted to deter-

TABLE II

FEATURES OF CONVERTIBLE BONDS AND CONVERTIBLE PREFERRED STOCKS

Convertible Bonds
Interest rate
Conversion ratio and any future changes
Market price
Optional call period and ratio
Optional call premium
Non-call period
Sinking fund call feature
Non-refundable feature
Anti-dilution features
Voting rights
Liquidation rights
Convertible Preferred Stock
Dividend rate
Cumulative dividend features
Conversion ratio and any future changes
Market price
Optional call period and ratio
Optional call premium
Non-call period
Voting rights
Liquidation rights
Participation rights

mine the extent to which the potential common shares should be given effect in computing earnings per share. The treatment of this potential increase in common shares in computations of earnings per share, especially as recommended by the Accounting Principles Board of the American Institute of Certified Public Accountants, will occupy our attention in the remainder of this article.

ACCOUNTING RESEARCH BULLETIN NO. 49

Prior to the issuance of APB Opinion No. 15 the reporting of EPS remained basically within the discretion of corporate management. The EPS figure was not considered an essential part of the financial statements covered by the independent auditor's opinion. The AICPA, through its Committee on Accounting Procedure, issued Accounting Research Bulletin No. 49 (Earnings Per Share) in April 1958, but this bulletin did not effectively deal with then nascent reporting problems.

ARB No. 49 attempted to minimize the importance of a single figure of earnings per share and stated, that in many cases, it is undesirable to give major prominence to such a figure. It was suggested that the better approach would be to consider the financial statements in their entirety. In paragraph 4a of ARB No. 49, the following general rule for computing EPS was suggested:

> [W]here used without qualification, the term earnings per share should be used to designate the amount applicable to each share of common stock or other residual security outstanding.

Further, the bulletin stated in paragraph 8b that

> when capitalizations consist essentially of two classes of common stock, one of which is convertible into the other and is limited in its dividend rights until conversion takes place as, for example, when certain levels of earnings are achieved, two earnings-per-share figures, one assuming conversion, are ordinarily necessary for full disclosure of the situation (Pro forma EPS).

In summary, the AICPA in ARB No. 49:

1) Did not require the reporting of EPS on the face of the income statement — which would have clearly placed such figures under the auditor's review and opinion.
2) Recognized that there was such a thing as a residual security — but did not spell out a clear definition or treatment.
3) Recognized that supplementary EPS computations would be necessary under certain circumstances — but did not spell out comprehensive guidelines.

This laissez-faire attitude on the part of the accounting profession terminated in 1966 largely as a result of increased merger and acquisition activity and the increased use of potentially dilutive securities. To some, this recognition may have seemed rather late in coming. It must be remembered, however, that the flood of merger activities did not arrive until the mid 1960's.

The Accounting Principles Board, which had earlier replaced the Committee on Accounting Procedure, issued Opinion No. 9 (Reporting the Results of Operations) in December 1966. The Opinion attempted to provide the specific guidelines which were lacking in ARB No. 49 for recognizing potential dilution. Three major recommendations were presented in this respect:

1) Disclosure should be made of EPS — preferably in the income statement;
2) under certain circumstances, pro forma EPS should be computed to supplement the primary EPS; and
3) disclosure should be made of the bases and assumptions which underlie the EPS computation.

Unfortunately, APB Opinion No. 9 did not require the presentation of earnings per share data on the face of the income statement; the pronouncement merely issued a strong recommendation to that effect. Therefore, management continued to control the reporting of EPS. A variety of computations of EPS, based on differing assumptions about complex securities and based on differing concepts of the net income figure, could still be presented in published reports, on the inside cover of the annual report, in the president's message, or as part of the historical review.

APB Opinion No. 9 did attempt to clearly define the term residual security. Paragraph 33 stated:

> [W]hen more than one class of common stock is outstanding, or when an outstanding security has participating dividend rights with the common stock, or when an outstanding security clearly derives a major portion of its value from its conversion rights or its common stock characteristics, such securities should be considered "residual securities" and not "senior securities" for purposes of computing earnings per share.

The term "major portion of value" was interpreted to mean more than 50 percent of the value of the security. Thus, if the value of a security based on residual features is more than twice the value based on senior security features, it was to be classified as a residual security and included with the outstanding common shares in computing EPS.

A series of issues arose which raised questions as to the validity of the concept and the practicability of its application. Determination of the "investment" value of a senior security and whether in fact a "major portion" of the security's value is derived from its common stock characteristics proved to be an exceedingly difficult problem. When coupled with the wide latitude allowed by the notion "major portion of value," very few convertible securities were actually assigned a residual status. A further deficiency of the definition, in the opinion of some, was the fact that the status of a residual security could change from year to year as a result of market action. The prospect of this "flip-flop" no doubt also contributed to the abandonment of the residual concept in APB Opinion No. 15.

Opinion No. 9 failed to deal effectively with such potentially dilutive securities as warrants and stock options. Acquisitions consummated with the use of such securities still enhanced reported earnings per share because the contingent issuances were not reflected in primary EPS. Rather, they might be presented only in secondary pro forma computations of earnings per share.

APB Opinion No. 15 Modifies EPS Reporting Requirements

APB Opinion No. 15, issued in May 1969, modified the rules considerably. Paragraph 12 of Opinion No. 15 makes presentation of EPS data on the face of the income statement mandatory.

> The board believes that the significance attached by investors and others

> to earnings per share data, together with the importance of evaluating the data in conjunction with the financial statements, requires that such data be presented prominently in the financial statements. The Board has therefore concluded that earnings per share. . . should be shown on the face of the income statement. . . .

As a result, the computation of EPS will be subject to the scrutiny of the auditor's opinion.

The Board replaced the term residual security with a new and more comprehensive concept of "common stock equivalent." In attempting to establish criteria under this concept for determining the status of convertible securities (bonds and preferred stocks), a variety of characteristics were considered, such as cash yield at issuance, increasing or decreasing conversion rates, liquidation and redemption amounts, the conversion price in relation to market price of the common stock and the use of market price in relation to investment value and market parity. The Board concluded that these tests were either too subjective or not sufficiently practicable.

A more appropriate criteria, based on the bank prime rate (a figure readily available), was chosen. Paragraph 33 of APB Opinion No. 15 concludes that

> a convertible security should be considered as common stock equivalent at the time of issuance if, based on its market price, it has a cash yield of less than 66 2/3 % of the then current bank prime interest rate.

This criteria is more objectively determinable than any test of equivalency or residuality which has existed and should lead to greater uniformity of practice. Moreover, it should be noted that the determination is made only once, at the time of issuance. This will obviously eliminate the flip-flop of the residual under Opinion No. 9.

In developing the concept of common stock equivalent, the Board, in paragraph 25, expanded the types of securities included.

> A common stock equivalent is a security which is not, in form, a common stock but which usually contains provisions to enable its holder to become a common stockholder and which, because of its terms and the circumstances under which it was issued, is in substance equivalent to a common stock. The holders of these securities can expect to participate in the appreciation of the value of the common stock resulting principally from the earnings and earnings potential of the issuing corporation. . . .

Paragraph 27 expands upon this thought by stating:

> In addition to convertible debt and convertible preferred stocks, the following types of securities are or may be considered as common stock equivalents:
>
> Stock options and warrants (and their equivalents) and stock purchase contracts — should always be considered common stock equivalents.
>
> Participating securities and two-class common stocks — if their participation features enable their holders to share in the earnings potential of

the issuing corporation on substantially the same basis as common stock even though the securities may not give the holder the right to exchange his shares for common stock.

Contingent shares — if shares are to be issued in the future upon the mere passage of time (or are held in escrow pending the satisfaction of conditions unrelated to earnings or market value) they should be considered as outstanding for the computation of earnings per share. If additional shares of stock are issuable for little or no consideration upon the satisfaction of certain conditions they should be considered as outstanding when the conditions are met.

Under this Opinion, stock options, warrants and contingent issuances of common shares under certain conditions, in addition to convertible securities (meeting the special test referred to above), will, if dilutive, be included in the determination of primary earnings per share. If a security is not considered a common stock equivalent but is nevertheless dilutive in its effect, it must, under the Opinion, be included in a secondary computation of EPS referred to as "fully diluted earnings per share." Modifications introduced by Opinion No. 15 may very well limit the extent to which deferred equity securities are used to propel mergers. To the extent that these securities enter into the EPS calculus, management will no longer be able to avoid reporting their dilutive effect on EPS in order to keep up the market price of shares and the related price/earnings ratio.

Application of APB Opinion No. 15

Let us examine, in a simple illustration, exactly how potential shares are converted to potential dilution for purposes of computing earnings per share.

Assume the following data for a company:	
Average number of outstanding common shares — December 31, 1969	1,000,000 shares
Net income applicable to common stock (after deducting preferred dividend of $2,000,000)	$5,000,000
Preferred shares convertible into common stock on 1:1 ratio. (Assume that preferred shares are not common stock equivalents — based on prime rate test.)	1,000,000 shares
Warrants — exercise price $25. (Average market price, and year end price, of shares in 1969 $50.)	200,000 shares

Prior to the issuance of APB Opinion No. 15, the company in this case would have reported an EPS of $5.00, computed as follows:

$$\frac{\text{Net Income available for common}}{\text{Average number of common shares outstanding}} \quad \frac{\$5{,}000{,}000}{1{,}000{,}000} = \$5.00 \text{ per share}$$

Under Opinion No. 15, given the facts in this case, it would no longer be acceptable to show an EPS of $5.00. Rather a primary earnings per share or earnings per common share and common equivalent share would be shown as $4.55, computed as follows:

$$\frac{\text{Net Income available for common} \quad \$5{,}000{,}000}{\text{Average number of common shares and equivalent shares} \quad 1{,}100{,}000} = \$4.55$$

Note that the total outstanding common shares are increased by 100,000 equivalent common shares. The denominator is therefore 1,100,000 shares. Common equivalent shares are computed under what is referred to as the treasury stock method. Under this method dilution is measured by the excess of the number of shares to be issued over the number of shares that could be acquired, at current market prices, assuming all of the proceeds were applied to this purpose. In our illustration the equivalent shares are determined as follows:

	Equivalent Shares	Total Amount
Proceeds of hypothetical exercise of Warrants	200,000 @ $25 =	$5,000,000
Less treasury shares which could be purchased with proceeds ($5,000,000 ÷ $50)	100,000	$5,000,000
Additional common equivalent shares	100,000	

The secondary presentation of fully diluted earnings per share requires inclusion of additional shares, if dilutive, assuming conversion of the preferred stock. The computation would be made as follows:

Primary computation:			
No. of shares	1,100,000	Net Income	$5,000,000
Additional shares assuming conversion of preferred shares	1,000,000	Add back preferred dividends	2,000,000
Total	2,100,000		$7,000,000

Fully diluted earnings per share would be $3.33 ($7,000,000/2,100,000). The company would report two earnings per share figures:

Primary earnings per share	$4.55
Fully diluted earnings per share	$3.33

It is important to note that potential common shares enter into the computation of earnings per share only if presently dilutive of earnings. (Losses continue to fall only on the actual common shareholders.) If in the foregoing example the exercise price of the warrants had approximated the current market price, or exceeded it, the potential shares would not have been given effect to at all. A dilution test is also applicable for convertible securities.

Controversy Over What is Meaningful EPS Figure Continues

Although substantial improvements have been achieved through the issuance of APB Opinion 15, the Opinion is not a panacea. Numerous issues have already been raised by the very members of the Accounting

Principles Board who by a consensus of at least two-thirds vote approved the Opinion.

Let us consider some of the dissenting viewpoints of members of the board.

1. APB Opinion No. 15 requires that earnings per share be shown on the face of the income statement. Why should the Opinion specify that this presentation must be made in this specific location? Does not this "dignify one figure on the income statement, above all others?"[4] Full disclosure is achieved through the presentation of the basic financial statements supplemented by additional information incorporated in the notes to the financial statements — not by the specific location of any one item.
2. Is the subject matter encompassed by APB Opinion No. 15 within the domain of accountants or is it an area which should be decided on by financial analysts? Should any expression by the Accounting Principles Board on the subject "go beyond requiring such disclosure of the respective rights and priorities of the several issues of securities which may be represented in the capital structure of a reporting corporation as will permit an investor to make his own analysis of the effects of such rights and priorities on earnings per common share"?[5]
3. Should a corporation "be denied the right to report factually determined earnings per weighted average outstanding common share on the face of the income statement as a basis against which to measure the potential dilutive effects on earnings per share of senior issues?"[6] From such a basis will not the investor be able to "make such pro forma calculations of common stock equivalence as he believes best serves his purpose?"[7]
4. It is inconsistent to treat securities, warrants and options "as-if" they are common shares for purposes of computing EPS and at the same time not reflect this "as-if" converted status in the balance sheet. Is this not misleading in itself?
5. The Opinion states (paragraph 28) that determination of whether a convertible security is a common stock equivalent should be made only at the time of issuance and should not be changed thereafter so long as the security remains outstanding. Will such a treatment "properly reflect the characteristics of those convertible securities which are currently the substantial equivalent of common stock — and are so recognized in the market place — which did not qualify for residual status at their date of issuance — possibly years previously?"[8] Would current conditions reflected in the market place be more meaningful?
6. Options and warrants are always regarded as common stock equivalents. However, their inclusion in primary EPS under the treasury stock method

[4] AICPA, *Earnings per Share*, APB Op. No. 15 at 238 (1969).
[5] *Id.*
[6] *Id.* at 227.
[7] *Id.* at 239.
[8] *Id.* at 240.

depends upon a comparison of exercise price and market price of the period. Therefore, changes in market price may cause a warrant or option to be placed in primary EPS in one period and be excluded therefrom in another period. "[P]rimary EPS will in some cases be affected by the market price of the stock obtainable on exercise, rather than solely by the economics of the transaction entered into. Some believe that this produces a circular effect in that reporting of earnings per share may then influence the market which, in turn, influences earnings per share. They believe that earnings per share should affect the market price and not vice versa."[9]

Those who argue in this fashion claim that the determination of whether a warrant or option is a common stock equivalent should be made only once — at the time of issuance in a manner similar to that of convertible securities.

CONCLUSION

In law, one finds the dichotomy of the letter of the law and the spirit of the law. In accounting, the problem is one of form and substance; that is, in accounting, one is continually confronted with the task of distinguishing between the mere form of a transaction and its real substance. Accounting seeks to portray a transaction in substance, not merely in form. One may look to such matters as accounting for intercorporate investments, leases, pensions and income taxes for evidence on this point. The position taken by the Accounting Principles Board in Opinion No. 15 continues to reflect the concern of accounting for the substance of a transaction. If a security, in form, is a convertible senior security, or a warrant, or option, but its terms make the issuance of additional shares, with a dilutive effect, a very real possibility, then the security should be incorporated in the computation of earnings per share. In the authors' opinion this is the philosophy of the computation of EPS under APB Opinion No. 15. The Opinion is complex; there are, and will continue to be, controversies over its concepts, interpretations, and applications. However, we believe that Opinion No. 15 represents a constructive attempt to deal with the current problems of potential shares and dilution of earnings per share.

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[9] *Id.* at 260.